AUTHORIZATION TO PLAN (ATP) AN ACADEMIC PROGRAM (Revised 06/12/07)

1. School/College and Department/Unit: Windward Community College

2. Chair/Convener of Planning Committee: Dr. Ross Langston

3. Program Category: _X_ New ___Modified ___ Interdisciplinary

4a. Degree or Certificate Proposed: A.S. in Veterinary Technology

4b. List similar degrees or certificates offered in UH System: C. A. in Veterinary Assisting (WCC)

5. Planning
   a. Planning period: January 2011 to January 2012 (maximum of 1 year is permitted by ATP)
   
   b. Activities to be undertaken during the planning phase are:
      
      • Create new classes
      • Modify existing space into a veterinary surgical suite
      • Form partnerships with local animal shelters, including those on the neighbor islands to create internship opportunities and secure support for the program
      • Gain approval from UH Institutional Animal Care and Use Committee (IACUC)
      • Hire Full-Time Faculty
      • Complete AVMA self-study and pre-accreditation paperwork

   c. Submission date of program proposal: January, 2012 (or sooner)

   d. Workload/budget implications during planning period
      Windward Community College will be hiring a veterinary technician (0.5 FTE) to help design new curriculum and create online versions of some of the existing classes that would be part of the new A.S. This position will be funded by a Rural Development Program grant set to begin in March or April, 2011.

6. Program Description
   We propose to create a 2-year A.S. in Veterinary Technology. This program will admit 25 students per year and will include on-campus instruction (lecture and lab) combined with fieldtrips and clinical internships. Distance learning opportunities and fast-track laboratory sections will be included where possible to allow students on neighbor islands to obtain the degree.

   An A.S. in Veterinary Technology is a STEM degree that involves courses in Animal Sciences, Biology, Chemistry, Mathematics and Zoology.

   Once created, it is our goal to pursue accreditation from the American Veterinary Medical Association (AVMA) for the program so that graduates will have a nationally-recognized degree
that is the industry standard.

The objectives of the program are to:

1) Train Hawaii’s veterinary para-professionals to perform essential tasks in the veterinary hospital and lab animal facilities (e.g., administer anesthesia, take and develop radiographs, assist with surgical procedures, dispense medications, perform vital lab tests, and provide client education)

2) Allow students to obtain industry-recognized credentials that will enable them to obtain employment at veterinary hospitals, lab animal facilities, and research laboratories throughout the United States.

3) To meet the current and anticipated workforce needs in Hawaii. There are no training opportunities available in Hawaii for veterinarian technicians.

The program objectives align to the following elements of the college's strategic plan:

- **Outcome 4.1:** Contribute to the development of a high-skilled workforce through the establishment of at least one new specific, career-focused degree, certificate or career pathway per year that leads to employment in emerging fields.
- **Outcome 4.2:** Establish partnerships with employers to create internships and job placements.
- **Outcome 4.3:** Expand the curriculum that prepares students for critical workforce shortage areas.
- **Outcome 4.4:** Create internships and service learning opportunities in the community.
- **Outcome 4.5:** Promote the knowledge, skills, and opportunities that support current and emerging STEM fields and careers.
- **Outcome 4.6:** Increase the number of degrees and certificates awarded in STEM fields.

7. Program Justification

Windward Community College currently offers a Certificate of Achievement in Veterinary Assisting. Since the program began, there have been five graduates and there are currently 37 students enrolled in the program. The demand for the current certificate is high. Most of the introductory classes are completely filled.

A survey of our current students indicates that a significant majority (60%) of veterinary assisting students say they would enroll in a veterinary technology program if one were to be offered.

There is also clear evidence of additional demand. The college also receives several inquiries each week from people on the neighbor islands who are interested in taking the program online. In the period between September and December, 2010, there were over two hundred searches on our campus web site for topics related to veterinary studies.

Finally, the training provided by the certificate is valued by employers: 50% of the students who were enrolled in second-semester Vet Assisting classes were offered jobs within one month of completing their spring classes.
However the Certificate of Achievement does not grant AVMA certification and does not educate students in all aspects of veterinary care (i.e., it does not include instruction on radiology, anesthesiology, pharmacology, or advanced nursing procedures). An A.S. would meet those requirements.

Information from our Veterinary Assistant advisory board, which consists of local veterinarians, veterinary practice managers, veterinary technicians, and HVMA representatives, indicates that an A.S. in Veterinary Technology degree would be supported by the Hawaii veterinary industry. Once the program is offered, Eric Ako, Executive Vice President for the HVMA, has agreed to lobby for official recognition, licensure and inclusion of Veterinary Technicians in the Hawaii Veterinary Practice Act. Such licensure is common in 45 other states.

The industry is already supporting the Certificate of Achievement and would support the A.S. Degree. Over 20 Oahu veterinary clinics, shelters, and lab animal facilities have signed up to serve as preceptor locations for student interns.

Local industry demand for veterinary technicians and assistants is considerable. A 2008 survey of Oahu veterinary clinics (n= 21 respondents) indicates that on average, each clinic plans to hire 3.4 assistants or technicians a year. Given that there are almost 100 clinics in the state of Hawaii (62 on Oahu alone) the veterinary community would be expected to hire several hundred assistants and technicians each year, and so the clinics should be easily able to place the 16-25 estimated graduates per year. In addition to work in veterinary hospitals, technicians can find employment in agriculture, animal quarantine facilities, lab animal facilities, veterinary pharmaceutical sales, and military service.

The United States Bureau of Labor Statistics has noted that nationally there "Excellent job opportunities will stem from the need to replace veterinary technologists and technicians who leave the occupation and from the limited output of qualified veterinary technicians from 2-year programs, which are not expected to meet the demand over the 2008-18 period. Employment is expected to grow much faster than average." (http://www.bls.gov/oco/ocos183.htm)

Veterinary technology is among the top five fastest-growing occupations nationwide, with employment in the field expected to grow 36% in the next nine years. In addition to working in private practice, veterinary technicians can find employment in animal shelters, biomedical research facilities, veterinary pharmaceutical sales, food safety and inspection, animal shelters and animal quarantine facilities.

Most states require Veterinary Technicians to pass a credentialing exam in order to gain licensure or certification. In addition, many states require that certain tasks (e.g., the administration of anesthesia) be performed only by credentialed technicians or veterinarians.

There are currently 160 AVMA accredited Veterinary Technology Programs in the United States. Hawaii is one of only five states that lack an AVMA accredited Vet Tech Program. As a result, students wishing to obtain an AVMA accredited vet tech degree are forced to attend out-of-state schools.
8. Description of resources required

a. Faculty (existing and new FTEs)
Dr. Ross Langston will be the primary current faculty member to participate in creation of this degree.

The college will request two new positions. AVMA regulations require each program to be staffed with 1 FTE Veterinarian and 1 FTE veterinary technician. These individuals will be responsible for teaching classes, administering the program, and maintaining compliance with AVMA and local agencies.

b. Library resources
The current library resources are adequate for the A.S. in Veterinary Technician. The library has recently purchased ca. $2000 in books in veterinarian studies and anatomy and physiology. Key online journal resources include the Journal of the American Veterinary Association.

The cost for additional library materials, beyond the current collection development activities, is estimated to be $500 in year one and $100 annually to cover costs of specialized online journals and new texts.

c. Physical resources (space, equipment, etc.)
Although WCC already has the bulk of the equipment and supplies needed, we will need to purchase additional equipment and supplies (ca. $22,000) in order to meet AVMA standards. We plan to split these costs between Perkins funds and program start-up monies.

An on-campus exam/surgery room must be created for clinical instruction. This room would need to house basic exam and treatment equipment (exam table, light, dental machine, anesthesia machine, etc) and comfortably accommodate 5-7 students, one instructor, and two animals at a time.

Existing Infrastructure and Support:
WCC already has much of the infrastructure and support necessary to offer a Veterinary Technology degree. These include:

- An advisory committee consisting of local veterinarians, veterinary practice managers, veterinary technicians, WCC faculty and HVMA representatives;
- A substantial inventory of veterinary equipment and supplies, acquired through Perkins grants and private donations;
- Industry buy-in: over 20 Oahu veterinary clinics, shelters, and lab animal facilities have signed up to serve as preceptor locations for student interns. In addition, VCA Kaneohe has allowed us to use some of their space for construction of a patient exam room;
- Current class offerings: The current Veterinary Assisting classes were designed using AVMA guidelines for veterinary technology programs. As such, these classes will require little to no modification in order to be incorporated into a veterinary technology program. Essentially, a whole year of the program is already being offered at WCC; and
- Student interest: The existing veterinary assisting classes have filled quickly. The majority of veterinary assisting students say they would enroll in a veterinary technology
program if one were to be offered.

d. Other resources required (staff, graduate assistantships, etc.)
Many of the ANSC courses involve materials to be purchase and lab to be set-up. These duties will be split between existing ATP personnel and the Veterinary Technician.

9. Five-Year Business Plan. Provide a five-year projected budget for the program that includes:

a. Annual costs to implement the program
Estimated recurring costs for the program are $143,600. This includes salary for two faculty members- 1 FTE Veterinarian ($70,000), 1 FTE Veterinary Technician ($45,000) and two lecturers/ semester ($18,000). Other miscellaneous expenses include supplies, equipment service contracts, student liability insurance, and AVMA accreditation fees. In total, miscellaneous expenses are estimated at $10,500/ yr.

b. Projected enrollment and estimated tuition revenue
As proposed, the program consists of 28 courses (64 credits) to be taken over a two-year period (32 credits/year/student). We anticipate enrollment of 25 students a year, so for the first year, the SSH= 32 credits and 25 students means a total of 800 SSH. Given the current tuition rate of $90/CR, the gross tuition revenue for year one would be $72,000 for the first year.

Assuming a 63% persistence rate (taken from the CAVETA Program Report), we estimate that 16 of the 25 students enrolled in the first year of classes will enroll in the subsequent year's classes, thus total enrollment for year two is 41 students (16 continuing + 25 beginning first-year classes) for 1312 SSH and $118,080 in annual tuition revenue.

c. How will the program be funded?
We anticipate that much of the program will be funded through resources obtained through a PCR submitted to the UH Board of Regents. Grant funds will be used to defray startup costs.

d. Does the current or proposed budget (Department/College/Campus) include funds or a request for funds for the proposed program? Please provide details.
Yes, the majority of the annual program expenditures have been accounted for in a PCR submitted to the UH BOR ($98,500/annually). This PCR includes funds for the 1.0 FTE veterinarian, lecturers, and supplies money. The only expense that is not covered in the PCR is the cost of the 1 FTE Veterinary Technician (ca. $45,000/yr).

e. Given a “flat budget” situation, how will the proposed program be funded?
Creating the program will require extraordinary funding and the creation of new positions. However, once created, the program will only require funding levels typical to maintaining science labs and facilities. Tuition money will meet the bulk of the required funds. External sources of funding and resources will be sought, in particular from local veterinarians in Hawai‘i, who are expected to be a continual source of support.

f. Mini Cost Revenue Template
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<td>PROGRAM COSTS</td>
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<td>Faculty without fringe</td>
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<td>Other</td>
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<tr>
<td><strong>TOTAL Expenses</strong></td>
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<td>143,600</td>
<td>143,600</td>
<td>143,600</td>
<td>143,600</td>
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</tbody>
</table>

| REVENUES |        |       |       |       |       |
| Projected Enrollment | 25 | 41 | 41 | 41 | 41 |
| Number of Courses | 14 | 27 | 27 | 27 | 27 |
| Number of Credits | 32 | 64 | 64 | 64 | 64 |
| SSH | 800 | 1312 | 1312 | 1312 | 1312 |
| Tuition Rate per Credit | 90 | 90 | 90 | 90 | 90 |
| Total Revenue from Tuition | 72,000 | 118,080 | 118,080 | 118,080 | 118,080 |
| Other Sources of Income (Grant Funds) | 28,672 | 28,672 | 0 | 0 | 0 |
| **TOTAL Revenues** | 100,672 | 146,752 | 118,080 | 118,080 | 118,080 |

10. Impact on current courses or programs.
Because the existing Vet Assisting classes were designed using AVMA standards for veterinary technology programs, these courses will require little or no modification for inclusion in the A.S. in Veterinary Technology. Essentially, the first year of the curriculum is already being offered at WCC.

The only program that may be impacted by the creation of this degree is the C.A. in Veterinary Assisting. Because the C.A. is equivalent to the first year of the A.S. in Veterinary Technology, there is a possibility that the two programs may compete for space and students as well as other resources (lab equipment, instructor time and clinical internship slots).
The committee plans to leave the C.A. in place for the 2011-2012 academic year, after which time it will reassess the need for the program and evaluate potential conflicts. If no negative impacts are found, the C.A. will be left in place as a stepping-stone towards the A.S. in Veterinary Technology.

No impacts on other programs at Windward CC and elsewhere in the UH system are anticipated. This is a specialized field that has no equivalent in Hawaii.

11. If this program is multidisciplinary, provide evidence of commitment for support from the colleges, departments, programs, and/or individuals expected to participate.
The majority of classes proposed for the A.S. in Veterinary Technology (those with ANSC alphas) will be taught by the Veterinarian or Veterinary Technician (n= 21 classes/49 credits). General Education Classes (e.g., ENG 100, PSY 100, CHEM 151/151L) will be taught by existing WCC faculty. Because the latter classes are required for other degree programs as well
as the A.S. in Veterinary Technology, we do not anticipate a significantly increased need for faculty or lecturers in these disciplines.

Reviewed by: *(The ATP has completed the campus approval process prior to review by Council of Chief Academic Officers)*

**Campus Chief Academic Officer:**
Comments and Recommendations:

Richard Fulton____________________________________
Print Name Signature Date

**Council of Chief Academic Officers (Systemwide Consultation):**
Comments/Recommendations:

________________________
Print Name Signature Date

**Chancellor: ___ Approved ___ Disapproved**

Douglas Dykstra____________________________________
Print Name Signature Date

*(Final signed copy is provided to the Vice President of Academic Planning and Policy for Program Action Report) 6/12/07*